

Amendments to the Specification:

Please amend the specification as follows:

Page 1: After the title, insert:

--This is a 371 national phase application of PCT/IB2004/002385 filed 26 July 2004, claiming priority to Japanese Patent Application No. 2003-281429 filed 29 July 2003, the contents of which are incorporated herein by reference.—

Page 4, paragraph 10 to page 5-6, paragraph 17:

Replace paragraphs 11 to 17 with the following amended paragraphs:

[0011] In accordance with an aspect of the invention, a battery pack charge/discharge control apparatus for controlling charge/discharge of a battery pack that is formed by combining a plurality of unit batteries of a secondary battery type, ~~is characterized by comprising:~~ a charge/discharge restriction means device for restricting the charge/discharge based on at least one of a capacity upper limit value and a capacity lower limit value of the unit batteries constituting the battery pack; remaining capacity detection means device for detecting remaining capacities of unit batteries constituting the battery pack; control value computation means device for computing a control state-of-charge value based on at least one of a minimum value and a maximum value of the detected remaining capacities; capacity difference computation means device for computing, as a capacity difference, a remaining capacity difference between the remaining capacity of a first unit battery and the remaining capacity of a second unit battery among the unit batteries whose remaining capacities have been detected, the remaining capacity of the second unit battery being less than the remaining capacity of the first unit battery; storage means device for storing a correlation between the capacity difference and an apparent state-of-charge value that is different from the control state-of-charge value; and apparent state-of-charge value computation means device for computing an apparent state-of-charge value with reference to the correlation based on the capacity difference.

[0012] According to the above-described battery pack charge/discharge control apparatus, an apparent state-of-charge value that is different from the control state-of-charge value is introduced. By computing an apparent state-of-charge value in accordance with the capacity difference value, it becomes possible to prevent, for example, an inconvenience in which it is determined that the control state-of-charge value cannot be increased to a control center value due to a capacity difference value.

[0013] It is preferable that the apparatus further comprise apparent state-of-charge value adoption ~~means~~ device for adopting the apparent state-of-charge value if the capacity difference is at least a predetermined capacity difference that is stored beforehand.

[0014] If the capacity difference value is greater than or equal to a predetermined capacity difference, the apparent state-of-charge value is adopted. If the capacity difference is less than the predetermined capacity difference, a different state-of-charge value is adopted. The adoption of this adoption ~~means~~ device in the invention will provide a high-precision charge/discharge control apparatus that possesses the advantages of the use of a different state-of-charge value.

[0015] It is also preferable that the charge/discharge control apparatus further comprise control state-of-charge value adoption ~~means~~ device for adopting the minimum remaining capacity of the unit batteries constituting the battery pack or a percentage of the minimum remaining capacity to a fully charged capacity value, as a control state-of-charge value for controlling the battery pack, if the capacity difference value is less than a pre-stored predetermined capacity difference value.

[0016] If the capacity difference value is less than the predetermined capacity difference, a control apparatus employing a control method proposed in Japanese Patent Application No. 2002-43216 is

introduced. That is, the minimum capacity value among the unit batteries that constitute the battery pack is computed, and the minimum capacity value is used as a control state-of-charge value to perform the control. Therefore, advantages of this prior application can be exploited, so that charge/discharge control with improved precision will become possible.

[0017] It is also preferable that the capacity difference computation ~~means~~ device include maximum remaining capacity detection ~~means~~ device for detecting a unit battery having a maximum remaining capacity in the battery pack, and minimum remaining capacity detection ~~means~~ device for detecting a unit battery having a minimum remaining capacity in the battery pack, and compute a remaining capacity difference between the maximum remaining capacity and the minimum remaining capacity as a capacity difference value. It is also preferable that a maximum capacity difference be used for determination.